



# Maximum Allowable Travel Specifications

## 999 SERIES 2, 3

**Boom No. 82 or 22EL**  
**Luffing Jib No. 135**  
**Fixed Jib No. 138**

### Jobsite Travel

999 SERIES 2 must be equipped with 184,600 Lb. (83 730 kg) crane counterweight and 44,000 Lb. (19 960 kg) carbody counterweight; 999 SERIES 3 must be equipped with 219,600 Lb. (99 610 kg) crane counterweight and 80,000 Lb. (36 290 kg) carbody counterweight. Refer to capacity charts for maximum wind speed for various boom, luffing jib and fixed jib lengths. Refer to luffing jib raising procedure for maximum boom and luffing jib lengths lifted unassisted.

#### 1. Machine Travel With Load

- A. Machine can swing and travel with 360 degree rating.
- B. Grade in any direction must not exceed 13 mm in 3m. *Travel with 100 percent of rated load prohibited.* Travel restricted to 90 percent of rated capacity with speed not to exceed 0.4 m/s.
- C. Travel surface must be firm, level and uniformly supporting. Capacity charts are based on static conditions; therefore judgment must be used to allow for dynamic effects of traveling with load. Carry load as close to ground as possible. Stabilize load with taglines. Travel slowly and smoothly to avoid shock loading boom, luffing jib, fixed jib and rigging.

#### 2. Machine Travel Without Load

- A. Position **boom to 75 degree** boom angle (plus or minus 1 degree) and set **luffing jib at 40 to 50 degrees** above horizontal. Grade in direction of travel should not exceed **3 percent (1.7 degrees) for SERIES 2; 6 percent (3.4 degrees) for SERIES 3.**
- B. Load blocks and/or hook and weight balls may be suspended beneath luffing jib and fixed jib points, or tied off to machine. Total suspended weight beneath luffing jib point must not exceed 3,000 Lbs. (1 360 kg). Total suspended weight beneath fixed jib point must not exceed 1,310 Lbs. (590 kg).
- C. Machine to travel on a firm and uniformly supporting surface. Travel allowed with 360 degree swing up to 1 percent grade; crane upperworks must be in-line with crawlers and grade, when grade exceeds 1 percent. Side-to-side grade must not exceed 1 percent (0.5 degrees) measured at boom hinge pins.
- D. Refer to table below for grade vs. angle and boom angle setting. When traveling on **uphill grade, lower boom** the corresponding degrees for grade to be traveled. When traveling on **downhill grade, raise boom** the corresponding degrees for grade to be traveled.
- E. Do not exceed 1 percent (0.5 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).

Percent Grade Vs. Angle In Degrees and Boom Angle Setting			
Percent Grade	Angle	Uphill Boom Angle	Downhill Boom Angle
1	0.5°	74.5°	75.5°
3	1.7°	73.3°	76.7°
6	3.4°	71.6°	78.4°